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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/074,036

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EXAMINER

BAYARD, E

ART UNIT

PAPER NUMBER

2731

DATE MAILED:

10/05/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

BC8

Office Action Summary

Application No.
09/074,036

Applicant(s)
Grimwood et al

Examiner
Emmanuel, Bayard

Group Art Unit
2731



☒ Responsive to communication(s) filed on Aug 17, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-38 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 1-5, 18-28, and 30-38 is/are allowed.

☒ Claim(s) 6-17 and 29 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

This is in response to amendment filed on 8/17/00 in which claims 1-38 are pending. The applicant's arguments have been fully considered but they are persuasive. Therefore, this action is made final. (See examiner rejection and response to argument below).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 6-17,29 are rejected under 35 U.S.C. 102(e) as being anticipated by Bingham et al U.S. Patent No 5,838,667.

As per claims 6, 7, 13, 29, Bingham et al disclose a modem for use at a head end of a system for bidirectional communication of digital data over a transmission media comprising: a master clock (see fig.6, element 220 and col.7, lines 29-35 and col.10, lines 15-50) for generating a master clock signal; means for generating upstream and downstream clock signal (see figs.1a, 1b, 6 elements 205, 206 and col.2, lines 50-67 and col.4, lines 20-40 and col.7, lines 25-67) which are phase coherent with said master clock signal said upstream clock signal having a frequency which is M/N times the frequency of said downstream clock signal where M and N are integers

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and are not equal; means coupled to receive said downstream clock signal (see figs 1a, 1b, 6 and col.3, lines 25-67 and col.5, lines 5-67 and col.7, lines 1-15) for using said downstream clock to transmit downstream data over said transmission medium; and means coupled to receive said upstream clock signal (see figs 1a, 1b, 6 and col.3, lines 25-67 and col.1, lines 55-67 and col.5, lines 5-67 and col.7, lines 1-15) for using it to recover upstream data over said transmission medium.

As per claims 8 , the system of Bingham et al inherently includes a synchronous code division multiplexing.

As per claims 9, the system of Bingham et al inherently includes a time division multiplexing.

As per claims 10, the system of Bingham et al inherently includes a DMT multiple access.

As per claims 11,12,14,15 the system of Bingham et al inherently includes mapping minislots, spreading codes and frequencies.

As per claims 16,17 the system of Bingham et al inherently includes a means for selectively altering the mapping.

Allowable Subject Matter

3. Claims 1-5, 18-28, 30-38 are allowed over the prior art of record.

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Response to Arguments

4. Applicant's arguments filed on 8/17/00 have been fully considered but they are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 8/17/00.

At paragraph 1, page 35 of the response, applicant's argues that Bingham et al does not teach **"that the upstream clock used are the recovered downstream and are at different frequency"** and also **"that the downstream clock is not at the right frequency for the upstream transmitters and receivers"**.

In response, Examiner respectfully disagrees. In fact Bingham does teach **"that the upstream clock used are the recovered downstream and are at different frequency"** and also **"that the downstream clock is not at the right frequency for the upstream transmitters and receivers"**(see col.1, lines 59-67 and col.7, lines 39-44). Applicant asserts that column col.7, lines 39-44 of Bingham only teach **"the upstream clock used are the recovered downstream and are at the same frequency"**. As one skilled in the art could suggest, Bingham teaching contains both aspect of the invention. Applicant only elaborates on the teaching that supports his arguments. However applicant failed to mention that col.1, lines 59-67 and col.7, lines 39-44 of Bingham also teach a downstream clock that generates a **variety of clock recovery frequencies** which may be interpreted as a plurality of different frequencies not the same as the upstream clock. Applicant amends claims 6-17,29 of the response filed on 8/17/00. However, theses changes do not affect the scope and the breadth of the claims as originally presented and/or in the

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manner in which the claims were interpreted by the Examiner when applying prior art within the previous Office Action. As such, these claims are rejected under the same rationale given in the prior Office Action and incorporated herein. Therefore, this action is made final.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kimbrow et al U.S. Patent No 5,898,744 teach a method for clock recovery in a communication.

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Hamilton-Pierce et al U.S. Patent No 5,809,395 teach a radiotelephony system having two way of operation.

Timm et al U.S. Patent No 56,055,268 teach a multimode digital modem.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is (703) 308-9573. The examiner can normally be reached on Monday-Thursday from 8:00 AM - 5:30 PM. The examiner can also be reached on alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (703) 305-4873.. The fax phone number for this Group is (703) 305-9508.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Emmanuel Bayard

Patent Examiner

October 2, 2000


CHI H. PHAM
SUPERVISORY PATENT EXAMINER
GROUP 2700 10/21/00